SLX-TX16

long range transmitter system

smartLynx

user guide

for more information visit our website, or talk to one of our technical team

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Introducing SmartLynx Cat5 AV Extender

What's in the box?

Thank you for buying the Smart-e SmartLynx Rack Mountable Cat5 AV Extender. Depending on the configuration of your system various quantities of the parts below may be included in your shipment.
If any of the accessories listed below are missing please contact the Smart-e dealer you purchased products from or contact Smart-e customer support at:

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If you ordered a SmartLynx SLX-TX16:

Item	Description	SLX-TX16
Transmitter Unit	16 Inputs and 16 Cat5 Outputs	Yes
Mains Cable	IEC Mains Lead	Yes

If you ordered SmartLynx Single Screen Receivers:

Item	Description	SLX-RX100	SLX-RX111	SLX-TX211
Short Range Receiver Unit	1 Cat5 Input and 1 Output	No	Yes	No
Long Range Receiver Unit	1 Cat5 Input and 1 Output	Yes	No	Yes

If you ordered SmartLynx Dual Screen Receivers:

Item	Description	SLX-RX212	SLX-RX212D
Receiver Unit	1 Cat5 Input and 2 Outputs	Yes	No
Cascadable Receiver Unit	1 Cat5 Input, 1 Cat5 Output 2 Standard Outputs	No	Yes

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Introducing SmartLynx Cat5 AV Extender

What is SmartLynx?

The SmartLynx systems are a combination of transmitter and receiver devices designed to transmit high resolution computer video and/or audio signals over Cat5 wire. AV stands for Audio Visual and includes such signal formats as Broadcast Video (TV video signal), Computer Video (VGA, SVGA, SXGA and etc. signals) and various formats of Audio signals.

Why is SmartLynx necessary?

Sometimes AV signals need to be transmitted over distances greater than commonly specified product limitations of 5m. In this case several choices are available, but most are expensive and bulky, which is in some cases simply not practical, due to space limitations in the conduits.
The SmartLynx allows the transmission of AV signals over a standard Cat5 UTP cable over distances of up to 300m. The actual distance is a function of the signal resolution and cable quality. The following is a rough guide to distance and resolution:

Cat5 Cable Length	Maximum Recommended Resolution
150m	UXGA (1600x1200)
200m	HDTV (720p,1080i, 1080p)
300m	SDTV, SVGA (800x600)

How does SmartLynx work?

The Smart-e SmartLynx systems are transmitter and receiver pairs designed to extend video, stereo audio and IR/RS232 signals over (UTP) unshielded twisted pair category 5 (Cat5) cabling. They are supplied with a UK power supply and consist of: a transmitter with a video input (connectors vary by model), an audio input and a Cat5 output and; a receiver with a cat5 input and corresponding outputs. Certain models are also supplied with local outputs and/or IR or RS232 connections.

The extended signals depends on the model but supported signals are UXGA, CVBS, YUV(YPbPr), Y/C, RGsB and RGBS analogue format and Stereo Audio. The basic concept behind this product is the ability to encode and decode analogue signal combined with precise line equalization and compensation.

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1. Preparing for installation

Start installation process by ensuring that all video displays and audio devices are compatible with the computers being used.
This is accomplished by connecting the devices directly to the computer and checking that the devices operate as desired without the SmartLynx system.

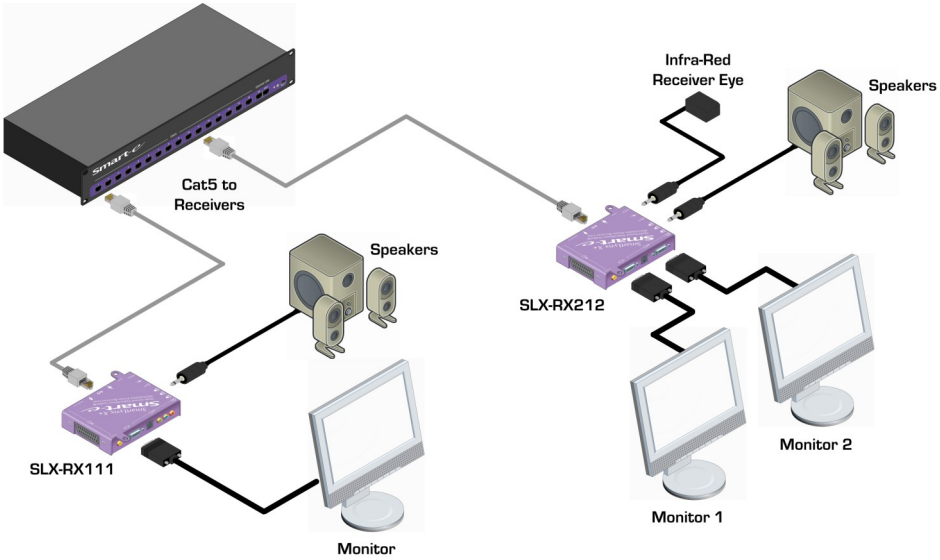

Fig. 1

Install CAT-5 wiring between desired locations. In order to minimize system operation difficulties, avoid routing the system cables near fluorescent lights, air conditioners, or machines that may create electrical noise.

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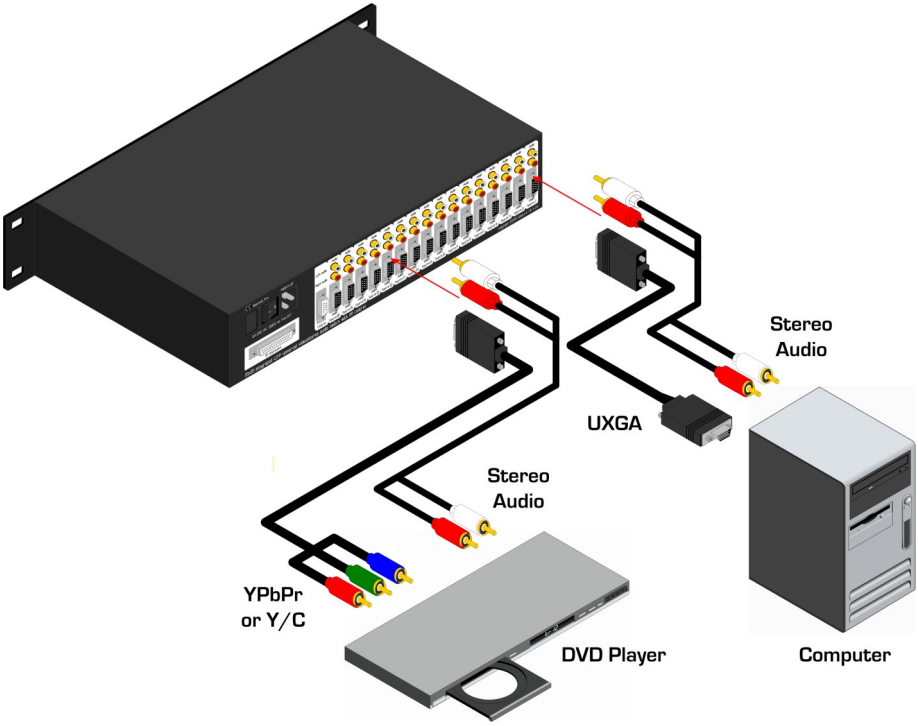
2. Connect Transmitter to the signal sources

2.1 Connect the video output of the source device to the input of the transmitter using the relevant interface cable if relevant.

2.2 Connect the audio output of the source device to the audio input of the transmitter using the appropriate cable.

2.3 If using RS232 or Infra-Red see Blaster installation on the following pages.



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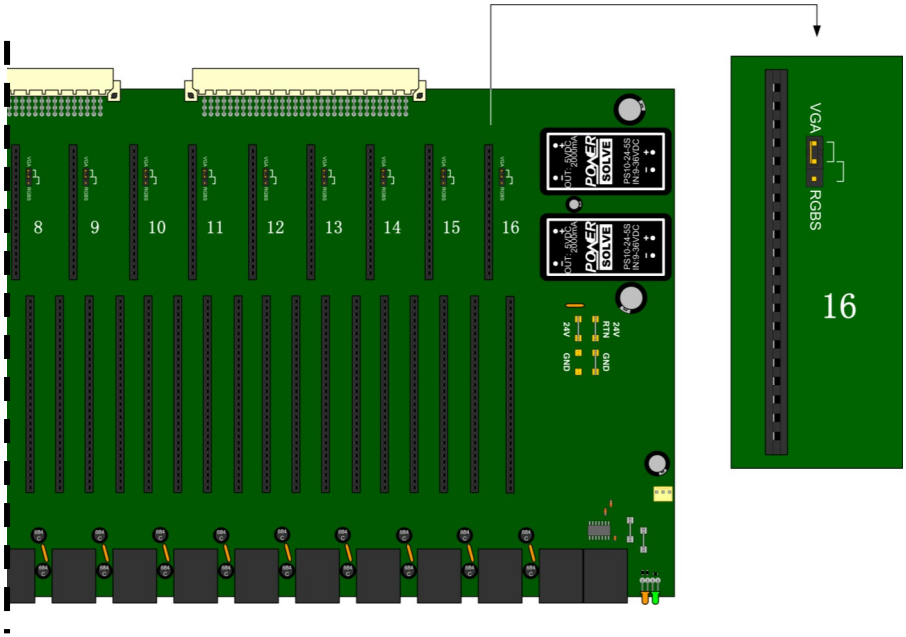
3. Setting Jumpers on Transmitter to correct position

3.1 The diagram below details how to correctly set the jumpers for the required video type (VGA or RGBS), for VGA the jumper should be in the top position for RGBS it should be at the bottom.



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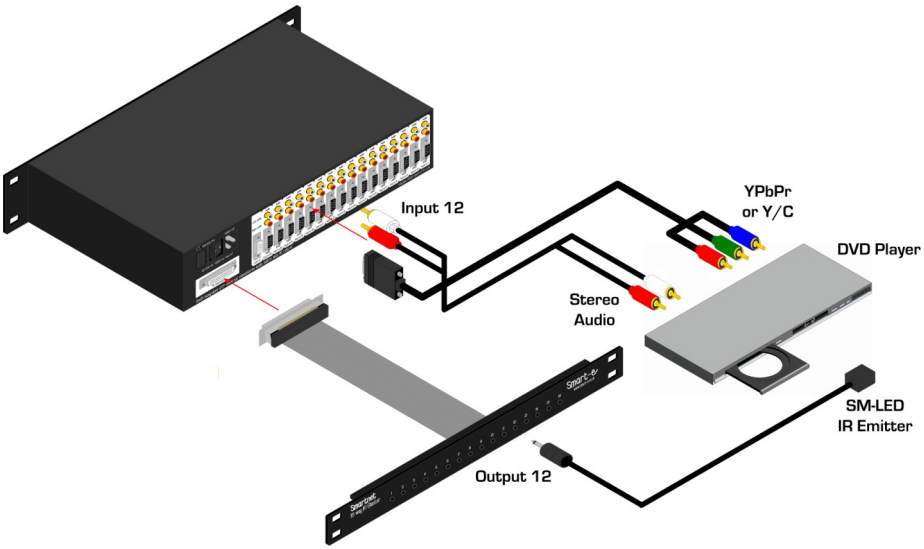
4. Connecting the IR Blaster unit (optional)

4.1 Using the IR Blaster control cable, attach one end into the IR control port on the rear of the SLX-TX16 and the other end to the rear of the 1U Blaster unit.

4.2 Then plug the IR emitter LED into the relevant 3.5mm jack socket on the front of the Blaster unit and position the LED at the device to be controlled. Making sure that the Blaster port number corresponds to the video input number on the SLX-TX16.

4.3 See IR output 12 on the Blaster corresponding to video input 12 on the Transmitter in the diagram below.



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5. System Power up

5.1 Turn the system on by plugging in the power adapter to the SmartLynx if they are not yet connected (See diagram opposite).

5.2 Power up your computer.

5.3 Observe both transmitter and receiver power LED are ON, and source device is switched on.

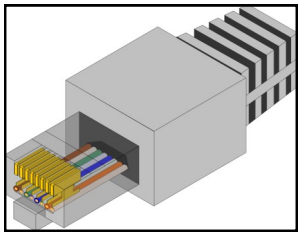
6. Preparing and connecting System CAT-5 cable

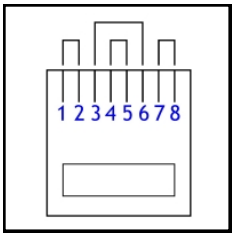
The SmartLynx utilizes category 5 (CAT 5), unshielded twisted pair (UTP) cable to transport signal between transmitter and receiver.

CAT 5 cable is more desirable than coaxial cable due to its low cost and ease of installation. This cable is used for LAN applications and is found in abundance, already installed, in many buildings . The category 5 is a standard which establishes minimum requirements for telecommunications cabling within a commercial building. The standard covers various aspects of wiring including telecommunications outlets.

Following is the wiring standard for terminating CAT 5 cable using RJ 45 connector:

Pair 1 Pins 1 & 2
Pair 2 Pins 3 & 6
Pair 3 Pins 4 & 5
Pair 4 Pins 7 & 8





Connectors: RJ-45
Capacitance: 14 pf/ft (46.2 pf/m)
Conductor Gauge: 24 AWG
Impedance: 100 +/- 15 ohms
4 - Pair

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Receiver Options

7. Smartlynx Receiver Options

There are a number of different receiver options available to accompany the SLX-TX16, please check the model number and relevant page number reference below.

SLX-RX100

UXGA, RGsB, YPrPb, Y/C, CVBS and Stereo Audio

For Instructions on Installation of the SLX-RX100 see page.....10

SLX-RX111

UXGA, RGBS, RGsB, YPrPb, Y/C, CVBS, Stereo Audio and RS232 or Infra-Red control option.

For Instructions on Installation of the SLX-RX111 see page.....14

SLX-RX211

Same as SLX-RX111 but with greater range and skew compensation.

For Instructions on Installation of the SLX-RX211 see page.....18

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Receiver Options

SLX-RX212/D

Dual Screen Output, UXGA, RGsB, YPrPb, Y/C, CVBS and Stereo Audio, with RS232 or Infra-Red control option. SLX-RX212D can be cascaded.

For Instructions on Installation of the SLX-RX212 see page.....24

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SLX-RX100

The SLX-RX100 allows for the reception of UXGA, RGsB, YPrPb, YUV, Y/C, CVBS and stereo audio, when broadcasted along a single Cat5 UTP cable from a Smart-e transmitter or matrix.

The unit then distributes the received signal to a display via a HD15 connection and to speakers via a 3.5mm mini jack.

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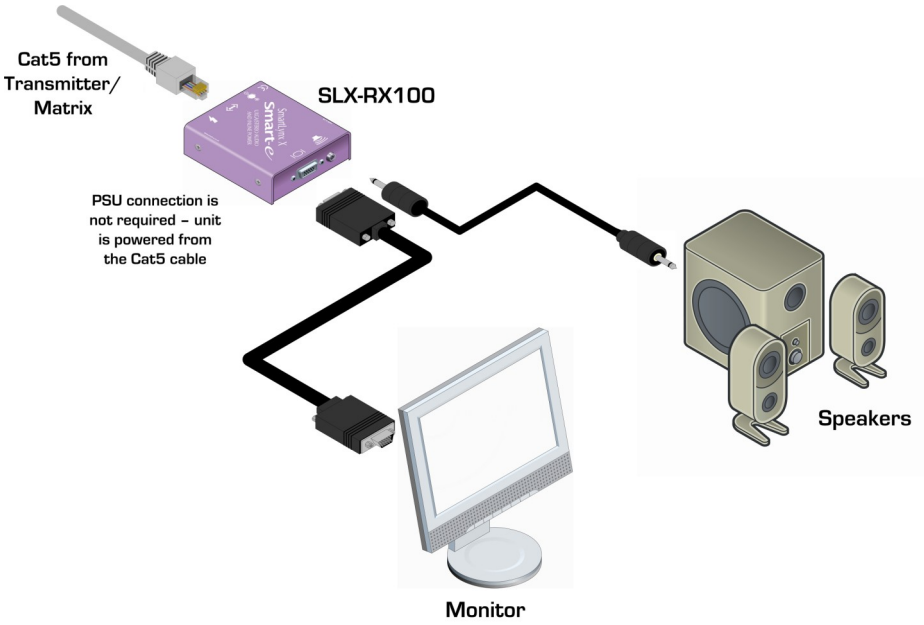
1. Connecting SLX-RX100 to the display device

1.1 Making sure that the Cat 5 cable is connected to the SLX-TX16 output, connect the cable to the RJ45 socket on the receiver unit.

1.2 If the cable connection is correct the power LED on the front of the receiver should illuminate (power is sent up the Cat 5 cable).

1.3 Connect the display to relevant connector on the receiver (see diagram below) using the appropriate cable.


Cat5 from Transmitter/ Matrix
SLX-RX100
PSU connection is not required – unit is powered from the Cat5 cable
Speakers
Monitor

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2. Setting the cable length dials

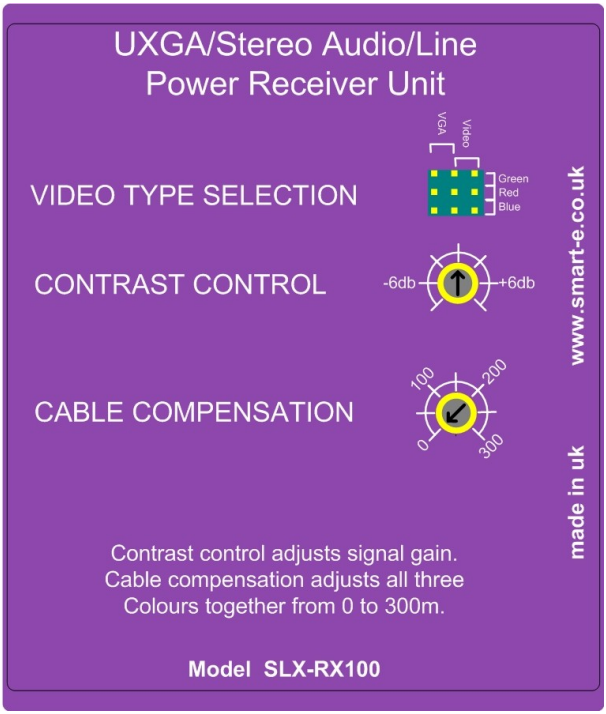
The Receiver unit is preset for approximately 50m which is sufficiently accurate for most applications. However if the image does not look sharp enough then follow the instructions below

2.1 Whilst looking at an image on the display, preferably a long horizontal bar, adjust the CABLE COMPENSATION dial.

2.2 Looking at the right-hand edge of the bar you will see the image change. A highlighting bright edge means over compensation, whilst a blurred dark edge means under compensation.

2.3 Adjust the dial until both effect are neutralized.

The Contrast control dial is factory pre-set and usually needs no adjustment.



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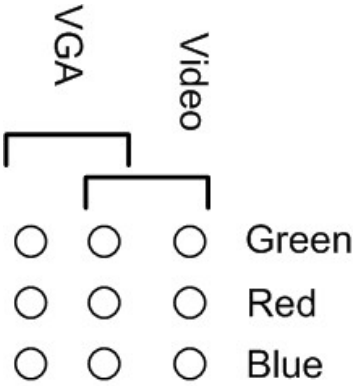
3. Sync Processing

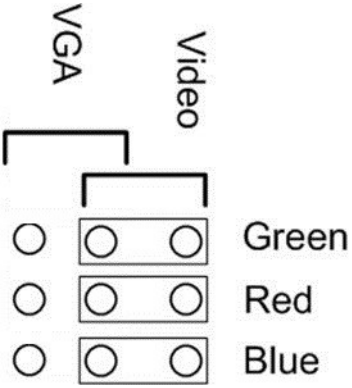
For VGA applications the Transmitter adds the Horizontal and Vertical Sync Pulses to the Blue and Red channels. However, since the unit has been designed for use with other types of video the Receiver provides the ability to pass both the Red and Blue channels transparently or process them to remove the Sync Pulses.



3.1 For composite, y/c and YP_bP_r (component) the jumpers must be set in the Video position.

3.2 For VGA the jumpers must be set in the VGA position.

The example below shows the jumpers set for composite, s-video or component



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SLX-RX111

The SLX-RX111 allows for the Short Range reception of UXGA, RGsB, RGBS, YPrPb, YUV and Long Range reception of Y/C, CVBS, Stereo Audio, and Infra-Red or RS232 control signals, when broadcasted along a single Cat5 UTP cable from a Smart-e transmitter or matrix.

The signals are received along the Cat5 from the transmitter and then distributed to the display and control equipment via the appropriate connection and to speakers via a 3.5 mm mini jack.

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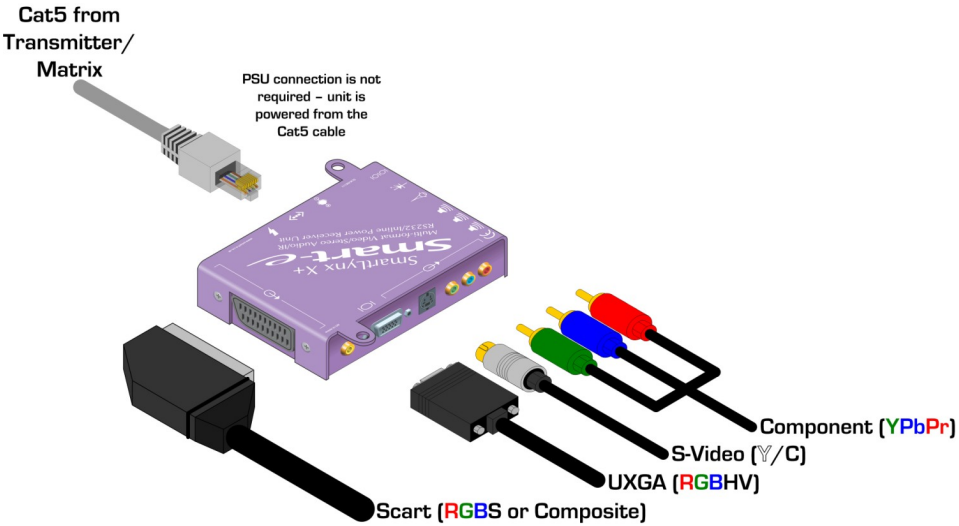
1. Connecting SLX-RX111 to the display device

1.1 Making sure that the Cat 5 cable is connected to the SLX-TX16 output, connect the cable to the RJ45 socket on the receiver unit.

1.2 If the cable connection is correct the power LED on the front of the receiver should illuminate (power is sent up the Cat 5 cable).

1.3 Connect the display to relevant connector on the receiver (see diagram below) using the appropriate cable.

1.4 If RS232 control is required then connect to the display via the 3.5mm minijack on the receiver using a CAB-J19-1M.


Cat5 from Transmitter/ Matrix
PSU connection is not required – unit is powered from the Cat5 cable
Component (YPbPr)
S-Video (Y/C)
UXGA (RGBHV)
Scart (RGBS or Composite)

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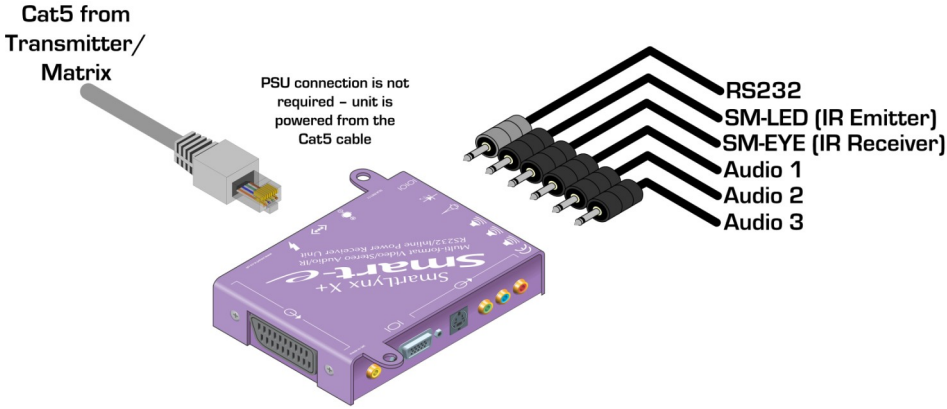
2. Connecting SLX-RX111 to audio and Infra-Red control

2.1 Connect the speakers or audio input on the display to the audio output on the receiver, using a 3.5mm jack plug.

2.2 If using the receiver to transmit Infra-Red signals back down the cable to the transmitter unit then connect an 'eye' to the jack position as shown in the diagram below.

2.3 If using the receiver to transmit Infra-Red signals up to the display from the transmitter unit then connect a 'LED' to the jack position as shown in the diagram below.

Please note: connecting the IR 'eye' will prevent the return RS232 path from the display



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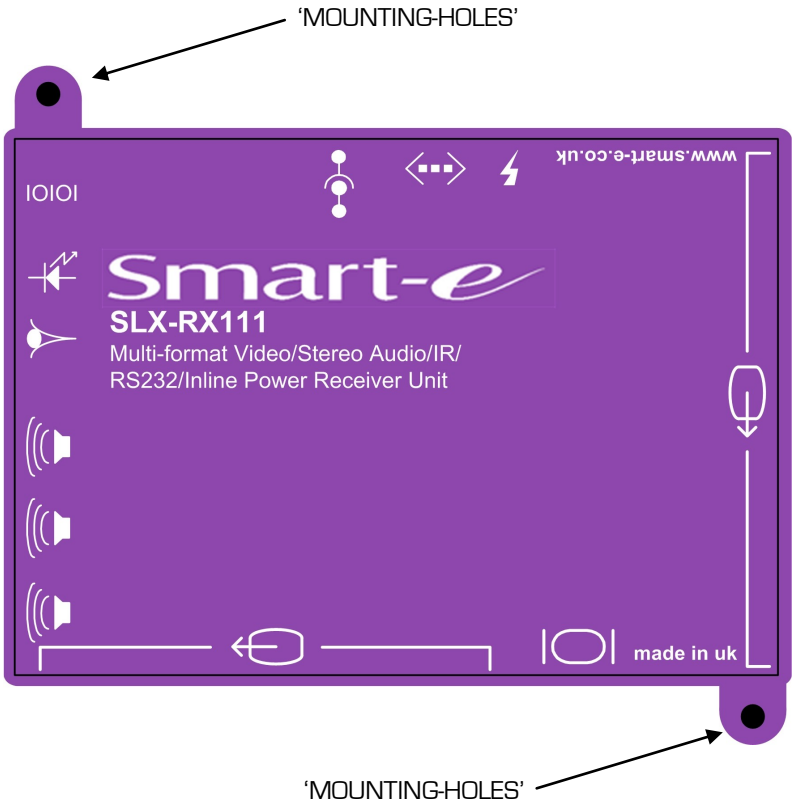
3. Mounting the Receiver

The receiver unit can compensate for cable losses over a length of 20-100m, and for mounting purposes the unit is provided with two 'mounting-hole' points for fixing to the wall or screen (See diagram below). Simply hold receiver in place, mark position of holes and set screws in these locations.

NB. Always use screws with heads larger than the holes.



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SLX-RX211

The SLX-RX211 allows for the Long Range reception of UXGA, RGsB, RGBS, YPrPb, YUV, Y/C, CVBS, Stereo Audio, and Infra-Red or RS232 control signals when broadcasted along a single Cat5 UTP cable from a Smart-e transmitter or matrix.

The signals are received along the Cat5 from the transmitter and then distributed to the display and control equipment via the appropriate connection and to speakers via a 3.5 mm mini jack.

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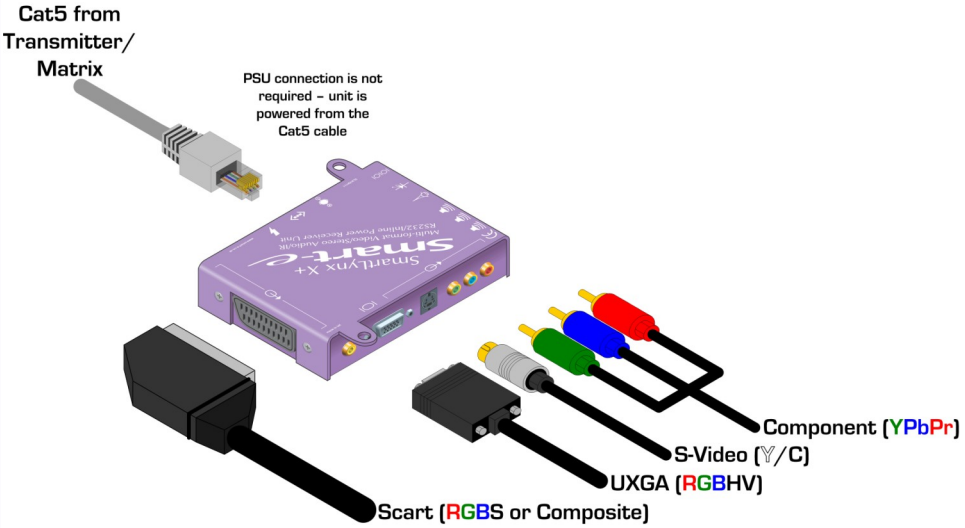
1. Connecting SLX-RX211 to the display device

1.1 Making sure that the Cat 5 cable is connected to the SLX-TX16 output, connect the cable to the RJ45 socket on the receiver unit.

1.2 If the cable connection is correct the power LED on the front of the receiver should illuminate (power is sent up the Cat 5 cable).

1.3 Connect the display to relevant connector on the receiver (see diagram below) using the appropriate cable.

1.4 If RS232 control is required then connect to the display via the 3.5mm minijack on the receiver using a CAB-J19-1M.


Cat5 from Transmitter/ Matrix
PSU connection is not required – unit is powered from the Cat5 cable
Component (YPbPr)
S-Video (Y/C)
UXGA (RGBHV)
Scart (RGBS or Composite)

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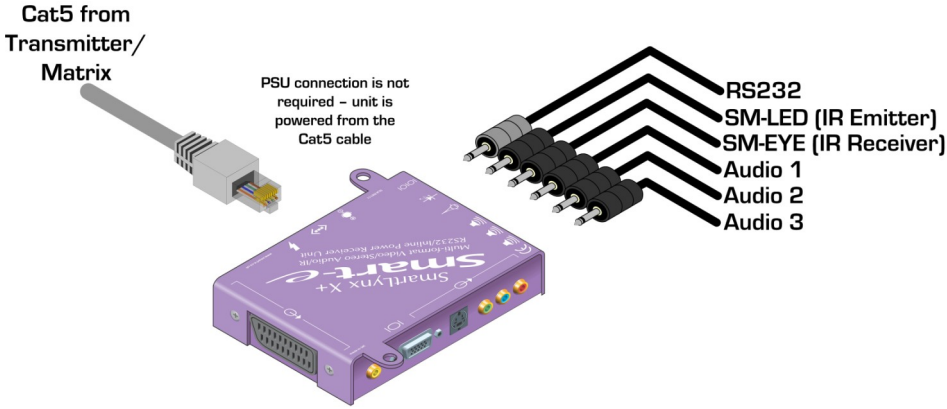
2. Connecting SLX-RX211 to audio and Infra-Red control

2.1 Connect the speakers or audio input on the display to the audio output on the receiver, using a 3.5mm jack plug.

2.2 If using the receiver to transmit Infra-Red signals back down the cable to the transmitter unit then connect an 'eye' to the jack position as shown in the diagram below.

2.3 If using the receiver to transmit Infra-Red signals up to the display from the transmitter unit then connect a 'LED' to the jack position as shown in the diagram below.

Please note: connecting the IR 'eye' will prevent the return RS232 path from the display



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3. Adjusting Cable Compensation (Equalization) and Contrast Control

3.1 To adjust equalization the 'pot' labelled as Cable Compensation may be rotated clockwise: start by turning the 'pot' completely ANTI-clockwise and then slowly turn clockwise until equalization is correct. As cable length increases the 'pot' will need to be turned further clockwise.

3.2 The Contrast Control adjustment (Gain) is factory set at 0dB. Leave at preset unless you require to compensate for another piece of equipment in the chain i.e. old display which has lost brightness.

4. Skew error compensation

The SLX-RX211 has built-in delay lines to compensate for skew errors in longer cable lengths of Cat6 cable. Each video colour can be delayed up to 62ns which can be adjusted and set using the 3 buttons on the base of the unit.

4.1 Press buttons 'INC' and 'DEC' together to enter the setting mode.

4.2 Press button 'SET' to select the colour to be delayed i.e. red/green/blue (indicated by the respective LED).

4.3 Choose the most delayed colour (the one which is to the right of the other colours) and delay the other 2 colours to that position

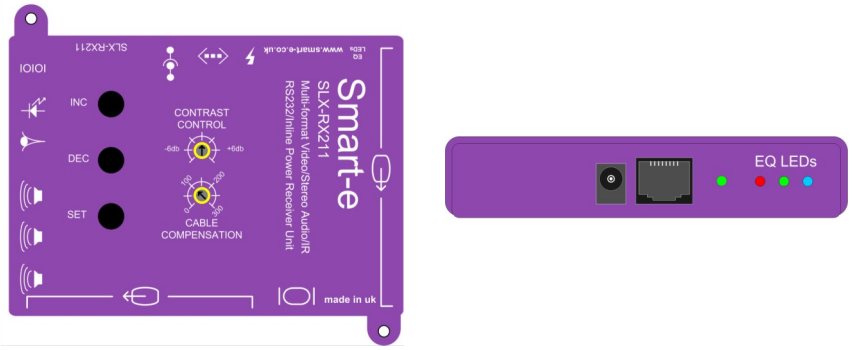
4.4 Press the 'INC' button to increase and 'DEC' button to decrease the delay.

4.5 Press buttons 'INC' and 'DEC' together to save the settings.

4.6 Pressing buttons 'DEC' and 'SET' together will reset all delays to zero.

Note

Although all 3 colours can be delayed it is usually only necessary to delay 2 of the colours to achieve skew error compensation.



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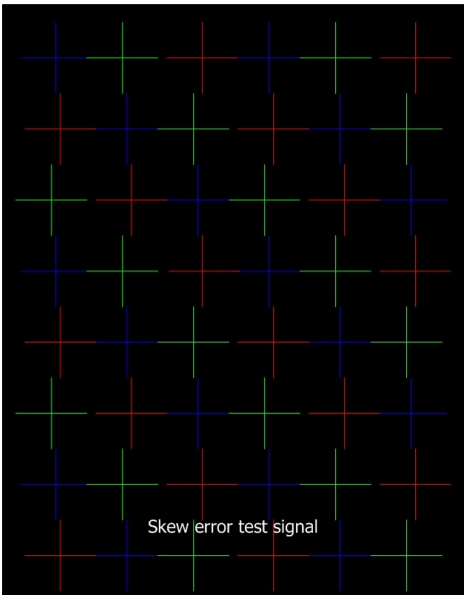
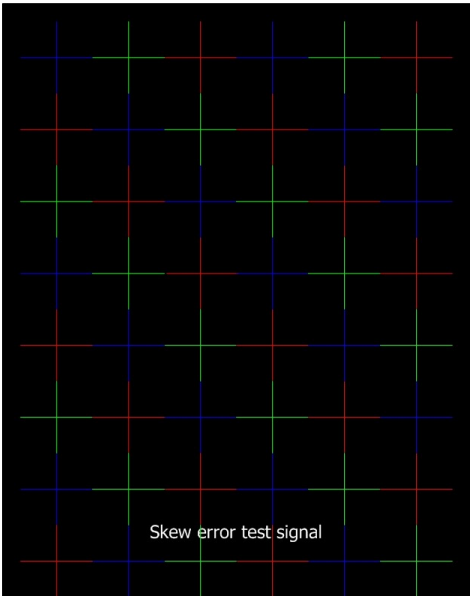
4a. Incorrect Skew adjustment.

In this example the Red signal is most delayed and the Green signal the least delayed.



4b. Correct Skew adjustment.

In this example colours are in alignment and hence correctly equalized.



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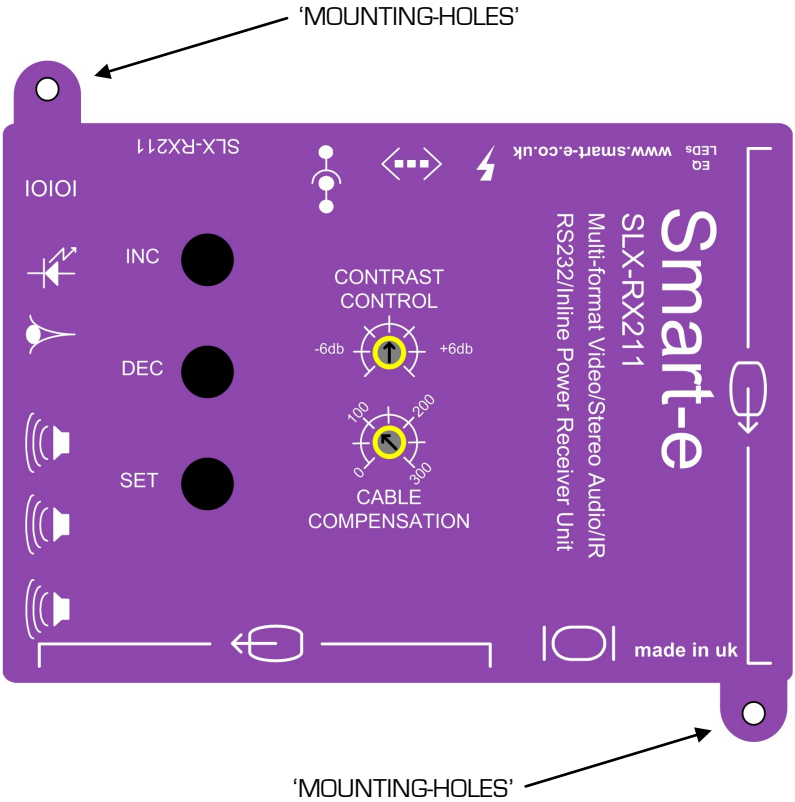
5. Mounting the Receiver

The receiver unit can compensate for cable losses over a length of 20-100m, and for mounting purposes the unit is provided with two 'mounting-hole' points for fixing to the wall or screen (See diagram below). Simply hold receiver in place, mark position of holes and set screws in these locations.

NB. Always use screws with heads larger than the holes.



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SLX-RX212/D

The SLX-RX212 allows for the Long Range reception of UXGA, RGsB, YPrPb, YUV, Y/C, CVBS, Stereo Audio, and Infra-Red or RS232 control signals when broadcasted along a single Cat5 UTP cable from a Smart-e transmitter or matrix.

The signals are received along the Cat5 from the transmitter and then distributed as a Dual-Screen output to the displays and control equipment via the appropriate connections, and to speakers via a 3.5 mm mini jack.

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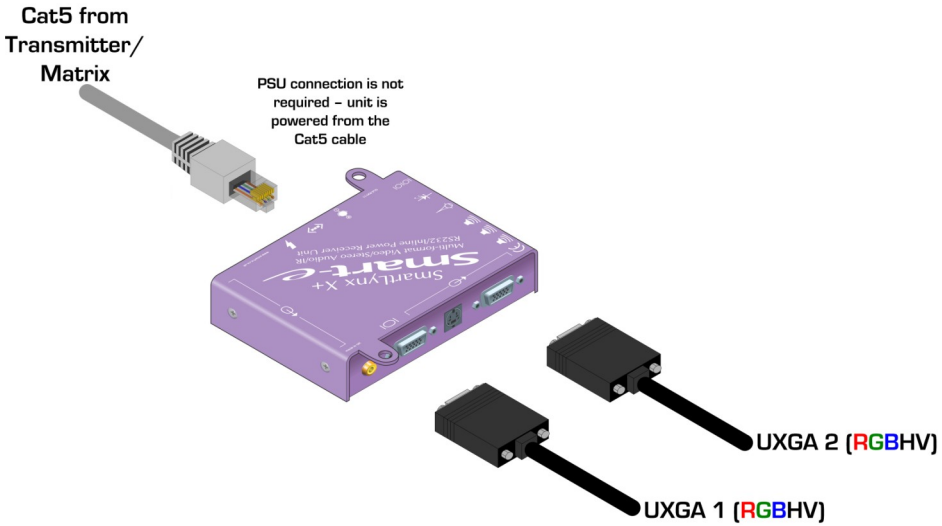
1. Connecting SLX-RX212 to the display device

1.1 Making sure that the Cat 5 cable is connected to the transmitter output, connect the cable to the RJ45 socket on the receiver unit.

1.2 If the cable connection is correct the power LED on the front of the receiver should illuminate (power is sent up the Cat 5 cable).

1.3 Connect the displays to the relevant connectors on the receiver (see diagram below) using the appropriate cable.

1.4 If RS232 control is required then connect to the display via the 3.5mm minijack on the receiver using a CAB-J19-1M.


Cat5 from Transmitter/ Matrix
PSU connection is not required – unit is powered from the Cat5 cable
UXGA 2 (RGBHV)
UXGA 1 (RGBHV)

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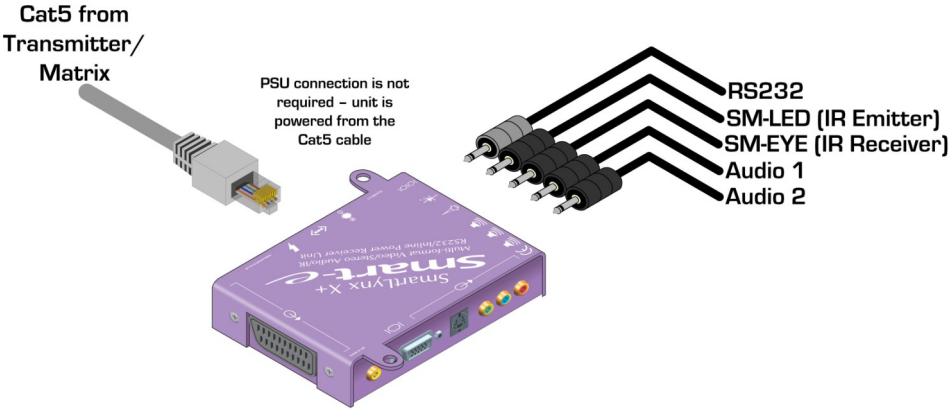
2. Connecting SLX-RX212 to audio and Infra-Red control

2.1 Connect the speakers or audio inputs on the displays to the audio outputs on the receiver, using 3.5mm jack plugs.

2.2 If using the receiver to transmit Infra-Red signals back down the cable to the transmitter unit then connect an 'eye' to the jack position as shown in the diagram below.

2.3 If using the receiver to transmit Infra-Red signals up to the display from the transmitter unit then connect a 'LED' to the jack position as shown in the diagram below.

Please note: connecting the IR 'eye' will prevent the return RS232 path from the display


Cat5 from Transmitter/ Matrix
PSU connection is not required – unit is powered from the Cat5 cable
RS232
SM-LED (IR Emitter)
SM-EYE (IR Receiver)
Audio 1
Audio 2

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3. Adjusting Equalisation and Contrast

3.1 To adjust equalization the 'pot' labelled as EQ may be rotated clockwise: start by turning the 'pot' completely ANTI-clockwise and then slowly turn clockwise until equalization is correct. As cable length increases the 'pot' will need to be turned further clockwise.

3.2 To adjust contrast (Gain) as with equalization begin by turning the 'pot' completely ANTI-clockwise and slowly turn the 'pot' clockwise until the desired image contrast (Gain) is displayed.

4. Skew error compensation

The SLX-RX212 has built-in delay lines to compensate for skew error in longer cable lengths. Each video colour can be delayed up to 62ns which can be adjusted and set using the 3 buttons on the base of the unit.

4.1 Press buttons 'INC' and 'DEC' together to enter the setting mode.

4.2 Press button 'SET' to select the colour to be delayed i.e. red/green/blue.

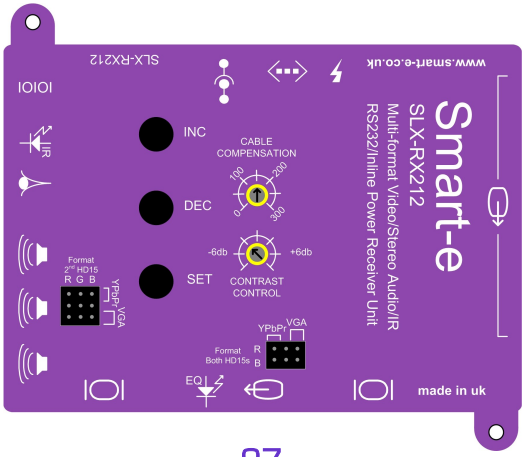
4.3 Press the 'INC' button to increase and 'DEC' button to decrease the delay.

4.4 Press buttons 'INC' and 'DEC' together to save the settings.

4.5 Pressing buttons 'DEC' and 'SET' together will reset all delays to zero.

Note

Although all 3 colours can be delayed it is usually only necessary to delay 2 of the colours to achieve skew error compensation.



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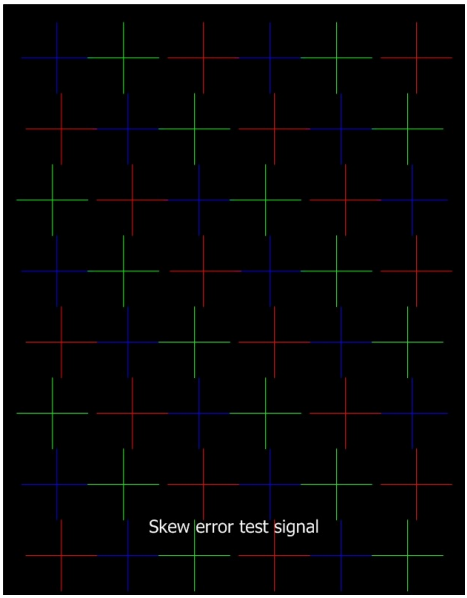
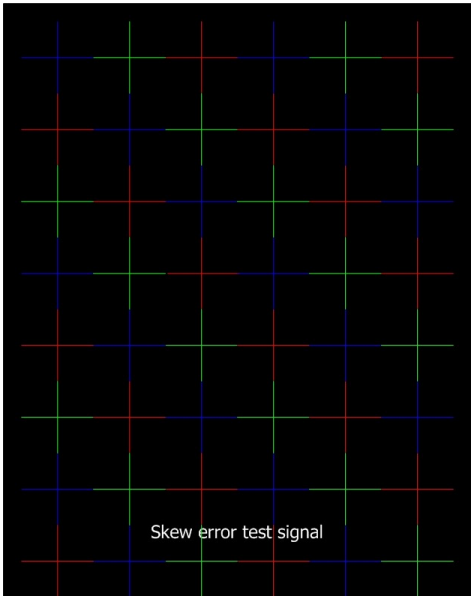
4a. Incorrect Skew adjustment.

In this example the Green is under equalized and the Red is slightly over equalized.



4b. Correct Skew adjustment.

In this example colours are in alignment and hence correctly equalized.



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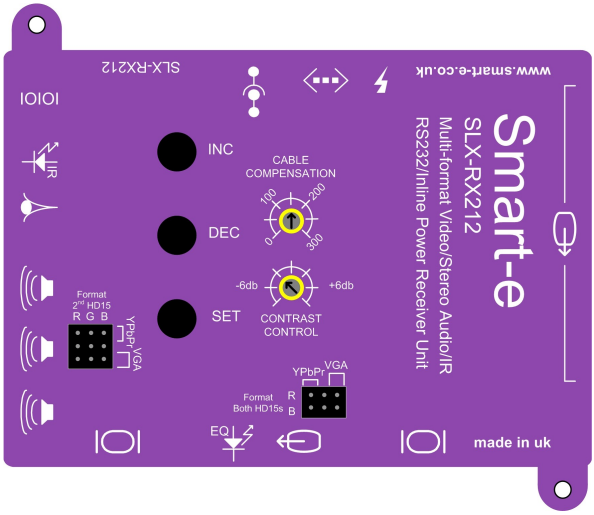
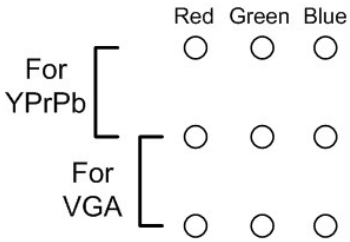
5. Setting the jumpers on the Receiver

5.1 On the SLX-RX212 you are able to select the format of video outputted by the HD15s by altering the jumpers on the base of the unit shown in the diagram below.

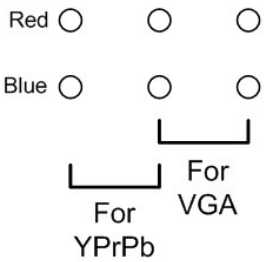


Viewed from underside of board [where the pots reside]

Video on Second HD15:



Video on Both HD15s:



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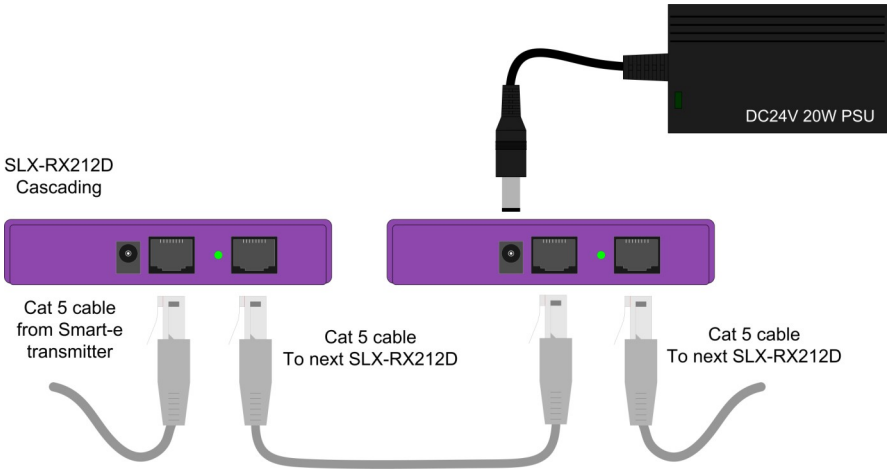
6. How to Cascade the SLX-RX212D

6.1 As well as having all the functions of the regular SLX-RX212, the SXL-RX212D also has the ability to be cascaded for up to 5 units.

6.2 In order to cascade the SLX-RX212Ds Cat5 cable should be used to join together the supplementary units, with the Cat5 output on the first unit to be joined to the Cat5 input on the second unit, etc. (See diagram below).

6.3 All additional SLX-RX212Ds connected after the initial unit, MUST have their own power supply units attached.



6.4 All SLX-RX212Ds then connect to display and audio equipment as shown for the standard unit on the previous pages.

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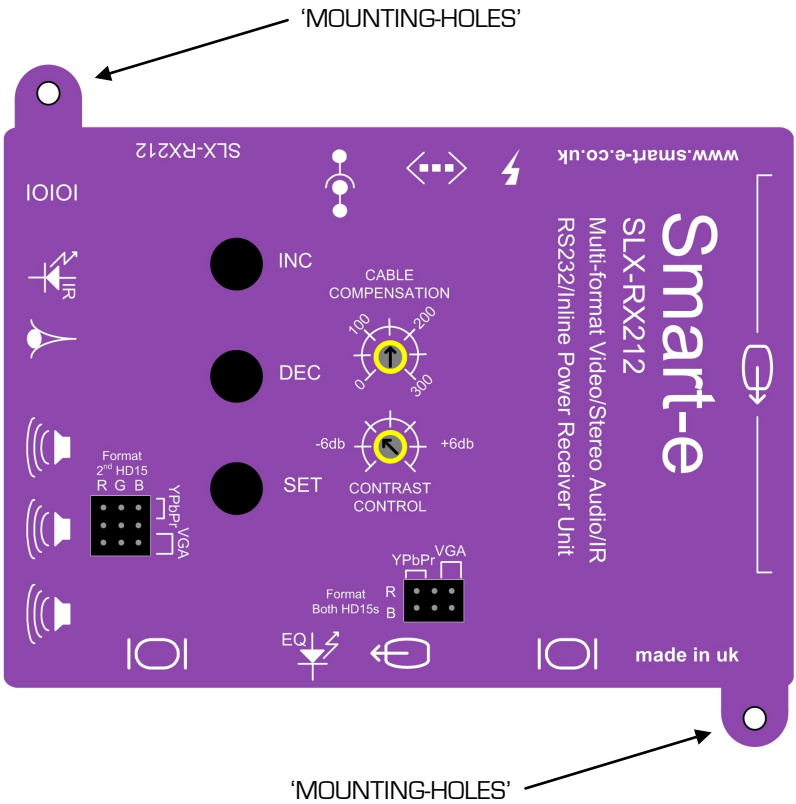
7. Mounting the Receiver

The receiver unit can compensate for cable losses over a length of 20-100m, and for mounting purposes the unit is provided with two 'mounting-hole' points for fixing to the wall or screen (See diagram below). Simply hold receiver in place, mark position of holes and set screws in these locations.

NB. Always use screws with heads larger than the holes.



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Technical Information

SLX-TX16

Video Input	
Signal Type - Connector	UXGA/RGBS/YUV/YPbPr/YC/CVBS - HD15
Bandwidth	400MHz
Impedance	75 Ohm
Audio Input	
Signal Type	Stereo Audio
Bandwidth	20kHz, 0dB
Impedance	10k Ohm
Connector	3.5mm mini-jack, Female
Local Audio Output if app.	
Signal Type	Stereo Audio
Bandwidth	20kHz, 0dB
Impedance	100 Ohm
Connector	3.5mm mini-jack, Female
Video Output	
Signal Type - Connector	UXGA/RGBS/YUV/YPbPr/YC/CVBS - RJ45
Bandwidth	400MHz
Impedance	100 Ohm
Audio Output	
Signal Type	Stereo Audio
Bandwidth	20kHz, 0dB
Impedance	100 Ohm
Connector	RJ45
IR Input	
Signal Type	30-500kHz modulated IR
Connector	RJ45
IR Output	
Signal Type	30-500kHz modulated IR
Connector	D15 to IR Blaster
RS232/422 Input	
Signal Type	RS232 up to 115kbaud, full duplex tx, rx. RS422 9600baud
Connector	D9
RS232/422 Output	
Signal Type	RS232 up to 115kbaud, full duplex tx, rx. RS422 9600baud
Connector	RJ45
Power	
Voltage/Frequency	90-230V/50-60Hz
Connector	IEC Mains Lead
Fuse Rating	1A A/S
Dimensions	
Height	2U (88mm)
Width	19"
Depth	205mm
Weight	5kg

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SLX-RX100

Video Input

Signal Type - Connector..... UXGA/YUV/YPbPr/YC/CVBS - RJ45
Bandwidth..... 400MHz
Impedance..... 75 Ohm

Audio Input

Signal Type..... Stereo Audio
Bandwidth..... 20kHz, 0dB
Impedance..... 10k Ohm
Connector..... RJ45

Video Output

Signal Type - Connector..... UXGA/YUV/YPbPr/YC/CVBS - HD15
Bandwidth..... 400MHz
Impedance..... 75 Ohm

Audio Output

Signal Type..... Stereo Audio
Bandwidth..... 20kHz, 0dB
Impedance..... 100 Ohm
Connector..... 3 x 3.5mm mini-jacks, Female

Power

Requirement - Connector..... 24VDC 500mA - 5mm x 2.1mm

Dimensions

Size..... 90 x 80 x 21 mm
Weight..... 0.2kg

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Technical Information

SLX-RX111

Video Input	
Signal Type - Connector	UXGA/RGBS/YUV/YPbPr/YC/CVBS - RJ45
Bandwidth	400MHz
Impedance	75 Ohm
Audio Input	
Signal Type	Stereo Audio
Bandwidth	20kHz, 0dB
Impedance	10k Ohm
Connector	RJ45
Video Output	
Signal Type - Connector	UXGA-HD15 / RGBS / YUV-3xRCA / YC-4pin minidin / CVBS
Bandwidth	400MHz
Impedance	75 Ohm
Audio Output	
Signal Type	Stereo Audio
Bandwidth	20kHz, 0dB
Impedance	100 Ohm
Connector	3 x 3.5mm mini-jacks, Female
IR Input	
Signal Type	30-500kHz modulated IR
Connector	3.5mm mini-jack, Female
IR Output	
Signal Type	30-500kHz modulated IR
Connector	RJ45
RS232/422 Input	
Signal Type	RS232 up to 115kbaud, full duplex tx, rx. RS422 9600baud
Connector	RJ45
RS232/422 Output	
Signal Type	RS232 up to 115kbaud, full duplex tx, rx. RS422 9600baud
Connector	3.5mm mini-jack, Female
Power	
Requirement - Connector	24VDC 500mA - 5mm x 2.1mm
Dimensions	
Size	120 x 94 x 23 mm
Weight	0.2kg

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Technical Information

SLX-RX211

Video Input

Signal Type - Connector..... UXGA/RGBS/YUV/YPbPr/YC/CVBS - RJ45
Bandwidth..... 400MHz
Impedance..... 75 Ohm

Audio Input

Signal Type..... Stereo Audio
Bandwidth..... 20kHz, 0dB
Impedance..... 10k Ohm
Connector..... RJ45

Video Output

Signal Type - Connector..... UXGA-HD15 / RGBS / YUV-3xRCA / YC-4pin minidin / CVBS
Bandwidth..... 400MHz
Impedance..... 75 Ohm

Audio Output

Signal Type..... Stereo Audio
Bandwidth..... 20kHz, 0dB
Impedance..... 100 Ohm
Connector..... 3 x 3.5mm mini-jacks, Female

IR Input

Signal Type..... 30-500kHz modulated IR
Connector..... 3.5mm mini-jack, Female

IR Output

Signal Type..... 30-500kHz modulated IR
Connector..... RJ45

RS232/422 Input

Signal Type..... RS232 up to 115kbaud, full duplex tx, rx. RS422 9600baud
Connector..... RJ45

RS232/422 Output

Signal Type..... RS232 up to 115kbaud, full duplex tx, rx. RS422 9600baud
Connector..... 3.5mm mini-jack, Female

Power

Requirement - Connector..... 24VDC 500mA - 5mm x 2.1mm

Dimensions

Size..... 120 x 94 x 23 mm
Weight..... 0.2kg

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Technical Information

SLX-RX212/D

Video Input

Signal Type - Connector..... UXGA/YUV/YPbPr/YC/CVBS - RJ45
Bandwidth..... 400MHz
Impedance..... 75 Ohm

Audio Input

Signal Type..... Stereo Audio
Bandwidth..... 20kHz, 0dB
Impedance..... 10k Ohm
Connector..... RJ45

Video Output

Signal Type - Connector..... UXGA/YUV/YPbPr/YC/CVBS - 2 x HD15 (+RJ45 on SLX-RX212D)
Bandwidth..... 400MHz
Impedance..... 75 Ohm

Audio Output

Signal Type..... Stereo Audio
Bandwidth..... 20kHz, 0dB
Impedance..... 100 Ohm
Connector..... 3 x 3.5mm mini-jacks, Female (+RJ45 on SLX-RX212D)

IR Input

Signal Type..... 30-500kHz modulated IR
Connector..... 3.5mm mini-jack, Female

IR Output

Signal Type..... 30-500kHz modulated IR
Connector..... 3.5mm mini-jack, Female

RS232 Input

Signal Type..... RS232 up to 115kbaud, full duplex tx, rx. RS422 9600baud
Connector..... 3.5mm mini-jack, Female

RS232 Output

Signal Type..... RS232 up to 115kbaud, full duplex tx, rx. RS422 9600baud
Connector..... 3.5mm mini-jack, Female

Power

Requirement - Connector..... 24VDC 500mA - 5mm x 2.1mm

Dimensions

Size..... 120 x 94 x 26 mm
Weight..... 0.2kg

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Troubleshooting

No video?

1) Are the green LEDs on both the transmitter and receiver units? If not check that the 24V power supply (PSU) is connected and the LED on the PSU is lit. Check the cable compensation dials on the underside of the unit. Over compensation of the Red and Blue channels can cause the display to misinterpret the sync pulses and not display an image.
2) Is the video source a laptop or floating? (a floating source is one which has no earth reference i.e. uses a double insulated PSU or a figure 8 mains cable). If so make sure the PSU is an earthed unit when not using the PSU supplied.
3) Is the audio input level too high? The audio level should be set to line level (0dB or 700mV peak to peak) to prevent interference.

Display has problems syncing?

1) Is the audio input level too high? The audio level should be set to line level (0dB or 700mV peak to peak) to prevent interference.

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Appendix

Limited Warranty Statement

A. Extent of limited warranty

1. Smart-e (UK) Ltd warrants to the end-user customers that Smart-e product specified above will be free from defects in materials and workmanship for the duration of 3 years, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.
2. Smart-e warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:

   a. Improper or inadequate maintenance or modifications

   b. Operations outside product specifications

   c. Mechanical abuse and exposure to severe conditions
3. If Smart-e receives during applicable warranty period notice of defect, Smart-e will at its discretion replace or repair defective product . If Smart-e is unable to replace or repair defective product covered by the Smart-e warranty within reasonable period of time Smart-e shall refund the cost of the product.
4. Smart-e shall have no obligation to repair, replace or refund unit until customer returns defective product to Smart-e.
5. Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.
6. Smart-e warranty is valid in any country where the covered product is distributed by Smart-e.

B. Limitations of warranty

TO THE EXTENT ALLOWED BY LOCAL LAW, NEITHER SMART-E NOT ITS THIRD PARTY SUPPLIERS MAKE ANY OTHER WARRANTY OR CONDITION OF ANY KIND WHETHER EXPRESSED OR IMPLIED , WITH RESPECT TO THE SMART-E PRODUCT , AND SPECIFICALLY DISCLAIM IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY , AND FITNESS FOR A PARTICULAR PURPOSE

C. Limitations of liability

To the extent allowed by local law the remedies provided in this warranty statement are the customers sole and exclusive remedies

TO THE EXTENT ALLOWED BY LOCAL LAW , EXCEPT FOR THE OBLIGATIONS SPECIFICALLY SET FORTH IN THIS WARRANTY STATEMENT , IN NO EVENT WILL SMART-E OR ITS THIRD PARTY SUPPLIERS BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES WHETHER BASED ON CONTRACT , TORT OR ANY OTHER LEGAL THEORY AND WHETHER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

D. Local law

To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law

Partial Product List

Product Range	Product Code	Description
SmartLynx - X	SLX-100 SLX-400	Transmitter and Receiver Pair Transmitter and Receiver Pair
SmartLynx-X +	SLX-111 SLX-211 SLX-212	Transmitter and Receiver Pair with RS232/IR Transmitter and Receiver Pair with RS232/IR Dual Transmitter and Receiver Pair with RS232/IR
SmartCast - X	SCX-TX600	One to Six Transmitter Unit
SmartCast-X+	SCX-TX550	One to Five Transmitter Unit with RS232/IR
SmartCast System	TUSC-1042 SCX-TX120E SCX-TX550E SLX-RX100ES	SmartCast Eurocard Rack (Up to 16 cards) Dual Screen Transmitter Eurocard One to Five Transmitter Eurocard with RS232/IR Eurocard Receiver for UGXA,YUV,Y/C, and Audio
SmartNet-X+ Matrix Switches	SNX-8x8+ SNX-16x16+	8 x 8 Distribution Matrix 16 x 16 Distribution Matrix (Up to 256 x 256)
SmartNet-X+ Matrix Bundles	SNX-8X8IRP SNX-8X8RSP	Complete Infrared Controlled 8X8 Matrix Package Complete RS232 Controlled 8X8 Matrix Package

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